



# **New Source Review**

What's Happening ?



# History of EPA's NSR Reform Effort

- Began working with CAAAC subcommittee in early 90's.
- Proposed changes in 1996 and supplemented this proposal with a Notice of Availability (NOA) in 1998.
- Continued discussion on alternative proposals for reforming NSR.
  - Plantwide Applicability Limit (PAL) option under which a source can make changes without triggering NSR so long as it stays below the cap
  - Sectors-based proposal for Electric Utilities
  - New applicability proposals
- Engaged in stakeholder discussions on other issues such as netting, debottlenecking, and aggregation.
- Came close to finalizing PALs and Class I at the end of the last Administration.

# What Issues did EPA Propose in 1996?

- Applicability Issues
- Actual Emissions Baseline
- Plantwide Applicability Limitation
- Clean Unit Exclusion
- Pollution Control Project Exclusion
- Undemonstrated Control Technology or Application
- Class I Issues
- Use of Prior Shutdowns and Curtailments
- Demonstrated in Practice
- Cut-off Date for Consideration of New Control Technologies
- Revisions to BACT process
- RACT/BACT/LAER/ Clearinghouse
- PSD Preconstruction Monitoring
- National Security Exclusion
- 1990 Clean Air Act Requirements
- Ozone Depleting Substances
- Special Netting Requirements
- Restrictions on Netting
- Debottlenecking, Delinking and Aggregation

# Recent Events

- In May 2001, The National Energy Policy Development Group asked EPA to study the impact of NSR on investment in new power plant and refinery capacity, and on energy efficiency, and environmental protection at existing power plants and refineries.
- In June 2001, EPA issued a Background Paper giving an overview of how NSR relates to the utility and refinery industry and requesting comment on these issues.
- Subsequently, EPA held 4 public meetings and considered the numerous comments received.
- On June 13, 2002, EPA issued its report to the President along with a letter that makes specific recommendations for improving the NSR program.

# Conclusions in Report to the President

- The NSR program has had little impact on investment in new power plant or refinery capacity.
  - There has been significant expansion in the power industry in recent years; and, there are plans for further expansion in the near future.
  - No plans for expansion in refinery industry but this is unrelated to NSR.
- The NSR program has impeded or resulted in the cancellation of projects that would maintain or improve reliability, efficiency or safety at existing power plants and refineries.
- The NSR program has resulted in significant environmental and health benefits by preventing emissions to the environment; although these benefits are difficult to quantify.

# Recommendations

- Finalize Changes for:
  - Actual-to-Projected-Future-Actual Applicability Test
  - Baseline Actual Emissions
  - Plantwide Applicability Limitations (PALs)
  - Clean Unit Test
  - Pollution Control Project Exclusion
- Propose changes for:
  - Safe Harbor Test for Routine Maintenance, Repair and Replacement (RMRR)
  - Debottlenecking Policy
  - Project Aggregation Policy

# Actual-to-Future Actual Test

- Our current rules require a facility to use the “actual-to-potential” test to determine whether major NSR will apply to a project.
- We will finalize a change that will enable a facility to compare the baseline actual emissions for an emissions unit to its projected future actual emissions to determine whether major NSR should apply – the “actual-to-future-actual” test.
- In projecting future actual emissions, a facility must determine the highest annual emissions it expects to achieve at the emissions unit for at least 5 years after the change.
  - The source may subtract emissions that the emissions unit could have accommodated before the physical or operational change; and
  - The source may subtract increased capacity utilization that is unrelated to the project (e.g. demand growth).
- Any facility which determines that major NSR does not apply:
  - Must keep a record of its determination and supporting information; and
  - Maintain records of annual emissions for a period of at least 5 years.

# Changes to the Baseline Emissions Calculation

- Under our current rules, the baseline actual emissions is determined by averaging the annual emissions from the two consecutive years immediately preceding the project unless another 2-year period is determined to be more representative of operations by the permitting authority.
- Under the rules to be finalized, the baseline actual emissions will be based on an annual average of emissions that occurred during any 24-consecutive month period in the past 10 years.
- This average must be adjusted to reflect current emissions control requirements.
- In order to use the full 10-year look-back period, the facility must have adequate data from which an accurate assessment of emissions can be made.

# Utility Provisions

- Under our current regulations, electric utility steam generating units (EUSGUs) have special provisions for determining NSR applicability (using an actual-to-representative actual test, using any 2 consecutive years out of 5 years to compute the emissions baseline, and allowing for a demand growth exclusion.) This is known as the “WEPCO applicability test”.
- We will be retaining the WEPCO test for EUSGUs as is, but will codify the 2 out of 5 year interpretation.

# Plantwide Applicability Limitations (PALs)

- Our current regulations do not specifically provide for PALs (although PALs have been issued by some States).
- Our final rules will specifically authorize States to issue PALs.
- A PAL would establish an annual facility-wide emissions limit under which the facility could make any changes without triggering NSR review for that pollutant.
- We are only finalizing provisions for actuals PALs. We will be proposing provisions for allowable PALs at a later date.
- An actuals PAL would generally be set by adding the significant level to the baseline actual emissions for the facility.

# PAL Effective Period

- A PAL would be effective for 10 years.
- At renewal, the permitting authority will consider other factors such as air quality needs, advances in technology, and availability of cost-effective control options to determine the renewed PAL level.
- A PAL can be increased during its term, if the facility complies with major NSR requirements and puts on good controls for new or modified units.

# Clean Unit Test

- The Clean Unit Test would allow an emissions unit with state-of-the art controls to use a permitted allowable-to-permitted allowable emissions test to determine whether major NSR should apply.
- Most emissions units that go through major NSR are presumed to be clean.
- Any emissions unit that has not been through major NSR may go through either a major NSR or SIP approved permitting process, including a requirement for public review, to be deemed “clean”.
- An emissions unit can continue to rely on the Clean Unit applicability test for 10 - 15 years.

# Pollution Control Project (PCP) Exclusion

- The PCP exclusion allows a project that reduces emissions of one or more air pollutants regulated under the Act to avoid major NSR review despite having a collateral significant emissions increase in another pollutant.
- Our current regulations provide a PCP exclusion to only EUSGUs. We extended the exclusion to other industries in a policy memo issued in 1994. Our final rules would codify the exclusions for all industries and expand the list of projects that are presumed to be environmentally beneficial.
- The PCP Exclusion only applies to projects at existing units; addition of new units may not qualify for the exclusion.

# To Qualify for a PCP Exclusion

- To qualify for a PCP, the project must pass two “tests”.  
(We are eliminating the proposed primary purpose test):
  - Environmentally Beneficial Test (shows benefits outweigh emissions increases);
  - Cause-or Contribute Test (shows that project will not cause or contribute to a PSD increment or NAAQS violation or adversely effect an AQRV).
- We are finalizing a list of technologies that are presumed to be environmentally beneficial;
- A project that is not on the list can still qualify as a PCP, but the source must go through a case-by-case permitting process.
- Any member of the public may petition EPA to consider adding a technology to the list. EPA will review the petition, and go through formal rulemaking to amend the list of projects that are presumed to be environmentally beneficial.

# The Process – Listed Projects

- The exclusion is self-implementing for projects that are on the list of environmentally beneficial projects – no permit action is required.
- The source owner/operator must send a notification to the permitting authority indicating their intent to use the exclusion.
- They are not obligated to hear a response from the permitting authority before beginning construction.
- Before beginning construction, the facility must determine whether it causes or contributes to a violation of a NAAQS or PSD increment, or poses an AQRV concern.
- As a practical matter, many of these projects will be subject to minor NSR review.

# The Process – Unlisted Projects

- A case-by-case permitting process will be required to use the exclusion to avoid major NSR for an unlisted project.
- The project must still meet the environmentally beneficial test and the cause-or-contribute test.

# Routine Maintenance, Repair and Replacement (RMRR)

- Under current policy, a case-by-case decision is needed to affirm that a project qualifies as RMRR. A multi-factor test is used to determine whether a project can be considered as RMRR.
- EPA will propose a “safe harbor test” that will clearly delineate when projects qualify for the RMRR exclusion.
- This test will establish cost-based thresholds.
- If the aggregate cost (based on a 5-year rolling average) of maintenance expenses and capital repair and replacement projects do not exceed a specified dollar threshold then the project would qualify as RMRR.
- If the cost thresholds are exceeded, the project may still qualify as RMRR under the multi-factor test.

# Further Clarifications to RMRR

- Replacement of existing equipment with other equipment that serves the same function but does not alter the basic design parameters will be considered RMRR.
- EPA will also consider identifying industry specific projects that qualify as RMRR for that industry.

# Debottlenecking

- Emissions increases that occur upstream or downstream of a physical or operational change must be included in the calculation of emissions increases to determine whether the project exceeds the significant level and triggers major NSR (current debottlenecking policy).
- Under our current policy, such emissions increases are generally quantified using the “actual-to-potential” test.
- We will propose to allow sources to use a permitted allowable-to-permitted-allowable test to quantify the emissions increases at upstream and downstream emissions units. (The emissions unit undergoing the physical or operational change will be subject to the actual-to-future-actual test.)

# Aggregation of Projects

- EPA has issued a variety of case-specific policy memos to address when two projects at a facility must be considered together for purposes of determining whether major NSR applies.
- We will propose to put forth one interpretation relative to aggregation of projects in regulatory language.
- Projects will generally be considered separate and independent from one another unless:
  - A project is dependent upon another project to be economically and technically viable; or
  - The project is intentionally split from another project to avoid NSR.

# Next Steps

- EPA has sent the rules to the Office of Management and Budget (OMB). OMB make take up to 90 days to review the rules.
- Once released from OMB, the rules will be published in the Federal Register, generally within 30 days.
- The final rules will take immediate effect in delegated States.
- In “SIP-approved States”, EPA will have to approve these changes into the State Implementation Plan before the requirements are effective in that State. The existing rules will continue to apply until the new requirements are approved into the SIP.
- We believe the final rules establish the minimal elements of an approvable State program. States will have to submit SIP revisions to incorporate the provisions, or demonstrate that their existing program is equal to or more stringent than these minimum program elements.